What is claimed is:

1.   A method to retrieve and analyze data from a wellbore, comprising:

locating at least one sensor in the wellbore or in communication with fluids produced

from the wellbore;

measuring at least one parameter of interest with the at least one sensor;

5   retrieving data that is indicative of the at least one parameter of interest from the at least

one sensor;

loading the data into a computer system; and

analyzing the data with the computer system to indicate trends in the wellbore.

10   2.   The method of claim 1, wherein the locating step comprises locating a plurality of

sensors, the measuring step comprises measuring at least one parameter of interest with the

plurality of sensors, and the retrieving step comprises retrieving the data that is indicative of the

at least one parameter of interest from the plurality of sensors.

15   3.   The method of claim 1, wherein the measuring step comprises measuring a plurality of

parameters of interest with the at least one sensor, and the retrieving step comprises retrieving

the data that is indicative of the plurality of parameters of interest from the at least one sensor.

4.   The method of claim 1, wherein the locating step comprises locating the at least one

20   sensor in a pipeline that receives the fluids flowing from the wellbore.

5.   The method of claim 1, wherein the locating step comprises locating the at least one sensor within a tubing string deployed in the wellbore.

6.   The method of claim 1, wherein the locating step comprises locating the at least one sensor exterior to a tubing string deployed in the wellbore.

7.   The method of claim 6, wherein the locating step comprises locating the at least one sensor above a packer attached to the tubing string.

8.   The method of claim 6, wherein the locating step comprises locating the at least one sensor below a packer attached to the tubing string.

9.   The method of claim 1, wherein the at least one parameter of interest comprises pressure, temperature, flow, a chemical property, acoustic data, current, magnetic data, electric data, or fluid data.

10.   The method of claim 1, wherein the retrieving data step comprises transmitting the data from the at least one sensor through a data line.

11.   The method of claim 1, further comprising selecting a specific period of time for which the data is loaded in the loading step.

12.   The method of claim 1, further comprising validating the data prior to the analyzing step.

13. The method of claim 12, wherein the validating step comprises synchronizing the data with respect to timing differences.

5   14. The method of claim 12, wherein the validating step comprises synchronizing the data with respect to time.

15. The method of claim 1, further comprising conditioning the data prior to the analyzing step.

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16. The method of claim 15, wherein the conditioning step comprises changing the sampling rate that is to be used in the analyzing step.

17. The method of claim 15, wherein the conditioning step comprises filtering the data to 15   remove noise from the data.

18. The method of claim 15, wherein the conditioning step comprises inputting missing data points.

20   19. The method of claim 18, wherein the inputting step comprises manually inputting the missing data points.

20. The method of claim 18, wherein the inputting step comprises allowing the computer system to estimate the missing data points.

21. The method of claim 15, wherein the conditioning step differs depending on whether the
5   data is analyzed to determine a long-term trend or an isolated event.

22. The method of claim 1, wherein the analyzing step comprises performing a long-term trend analysis of the wellbore.

10   23. The method of claim 22, wherein the performing a long-term trend analysis step comprises plotting the data against time.

24. The method of claim 22, wherein the performing a long-term trend analysis step comprises calculating at least one parameter using the data.

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25. The method of claim 24, wherein the calculated parameter comprises one of productivity index, gas-oil ratio, water-oil ratio, pressure at wellhead, pressure drop from the bottomhole to the wellhead, pressure drop between the reservoir and the completion, ratio of pressure drop between the reservoir and the completion and the oil flow rate, oil flow rate, gas flow rate, liquid
20   phase flow rate, or water flow rate.

26. The method of claim 1, wherein the analyzing step comprises performing an isolated event analysis of the wellbore.

27.   The method of claim 26, wherein the performing an isolated event analysis step comprises conducting a robust analysis of the wellbore.

5   28.   The method of claim 27, wherein the conducting a robust analysis step comprises exporting the data to a program that conducts the robust analysis step.

29.   The method of claim 26, wherein the performing an isolated event analysis step comprises conducting a quick screening analysis of the wellbore or reservoir intersected by the

10   wellbore.

30.   The method of claim 29, wherein the conducting a quick screening analysis step comprises conducting a build-up analysis, a drawdown analysis, or a steady-state analysis.

15   31.   The method of claim 30, wherein the conducting a quick screening analysis step comprises plotting some function of pressure versus some function of time for the build-up and drawdown analysis.

32.   The method of claim 30, further comprising, for the build-up and drawdown analysis,

20   ensuring that a steady-state period precedes any relevant build-up or drawdown period.

33.   The method of claim 29, wherein the conducting a quick screening analysis step comprises calculating permeability, skin, or productivity index.

34.   The method of claim 29, wherein the computer system conducts the quick screening

analysis using certain rules and assumptions to ensure the analysis is not a characterization tool.

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35.   The method of claim 1, wherein multiple wellbores are analyzed.

36.   The method of claim 1, further comprising sounding an alarm if a data or parameter of

interest is outside of an expected range.

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37.   The method of claim 1, further comprising taking corrective action as a result of the

analyzing step.

38.   A method to screen wellbores in order to determine which wellbores should be subjected

15   to a well test analysis tool, comprising:

        locating at least one sensor in the wellbore or in communication with fluids produced

from the wellbore;

        obtaining data from the at least one sensor that is indicative of at least one parameter of

interest;

20   conducting a quick screening analysis of the data; and

        determining whether to subject the data to a well test analysis tool depending on the

outcome of the conducting step.

39.   The method of claim 38, wherein the conducting a quick screening analysis step is

performed using a computer system.

40.   The method of claim 39, wherein the conducting a quick screening analysis step

5   comprises calculating permeability, skin, or productivity index of the wellbore.

41.   The method of claim 39, wherein the conducting a quick screening analysis step

comprises conducting a build-up analysis, a drawdown analysis, or a steady-state analysis.

10   42.   The method of claim 41, wherein the conducting a quick screening analysis step

comprises plotting some function of pressure versus some function of time for the build-up and

drawdown analysis.

43.   The method of claim 41, further comprising, for the build-up and drawdown analysis,

15   ensuring that a steady-state period precedes any relevant build-up or drawdown period.

44.   The method of claim 38, wherein the computer system conducts the quick screening

analysis using certain rules and assumptions to ensure the analysis is not a characterization tool.

45.   A system to retrieve and analyze data from a wellbore, comprising:

at least one sensor located in the wellbore or in communication with fluids produced from the wellbore, the at least one sensor measuring at least one parameter of interest;

5   a computer system adapted to retrieve data that is indicative of the at least one parameter of interest from the at least one sensor; and

the computer system adapted to analyze the data to indicate trends in the wellbore.

46.   The system of claim 45, wherein a plurality of sensors are located in the wellbore or in

10 communication with fluids produced from the wellbore.

47.   The system of claim 45, wherein the at least one parameter of interest comprises pressure, temperature, flow, a chemical property, acoustic data, current, magnetic data, electric data, or fluid data.

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48.   The system of claim 45, wherein the data is validated prior to it being analyzed.

49.   The system of claim 45, wherein the data is conditioned prior to it being analyzed.

20 50.   The system of claim 45, wherein the computer system is adapted to perform a long-term trend analysis of the wellbore.

51.   The system of claim 45, wherein the computer system is adapted to perform an isolated event analysis of the wellbore.

5   52.   The system of claim 51, wherein the performing an isolated event analysis step comprises conducting a quick screening analysis of the wellbore or reservoir intersected by the wellbore.

53.   The system of claim 52, wherein the conducting a quick screening analysis step comprises conducting a build-up analysis, a drawdown analysis, or a steady-state analysis.

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54.   The system of claim 52, wherein the computer system conducts the quick screening analysis using certain rules and assumptions to ensure the analysis is not a characterization tool.

55.   The system of claim 45, wherein multiple wellbores are analyzed.

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56.   The system of claim 45, further comprising an alarm that sounds if a data or parameter of interest is outside of an expected range.

57.   The system of claim 45, wherein corrective action is taken as a result of the analysis

20   performed by the computer system.

58.   A system to retrieve and analyze data from a wellbore, comprising:

        at least one central processing unit (CPU);

at least one memory in communication with the CPU;

the at least one CPU adapted to load data from a wellbore, the data indicative of at least

one parameter of interest; and

the at least one CPU adapted to analyze the data by using routines stored in the at least

5   one memory in order to indicate trends in the wellbore.

59.   A method to screen wellbores in order to determine which wellbores should be subjected

to a well test analysis tool, comprising:

using a central processing unit (CPU) to load data, the data indicative of at least one

10   parameter of interest in a wellbore;

conducting a quick screening analysis of the data with the CPU;

restricting the analysis with certain rules and assumptions to ensure the analysis is not a

characterization tool; and

determining whether to subject the data to a well test analysis tool depending on the

15   outcome of the conducting step.